



6J6

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MEDIUM-MU TWIN TRIODE

MINIATURE TYPE

GENERAL DATA

Electrical:

Heater for Unipotential Cathode:

Voltage. 6.3 ac or dc volts

Current. 0.45 amp

Direct Interelectrode Capacitances:

	Without External Shield	With External Shield ^o	
<i>Unit No. 1</i>			
Grid to plate.	1.6	1.5	$\mu\mu\text{f}$
Grid to cathode and heater	2.2	2.6	$\mu\mu\text{f}$
Plate to cathode and heater	0.4	1.6	$\mu\mu\text{f}$
<i>Unit No. 2</i>			
Grid to plate.	1.6	1.5	$\mu\mu\text{f}$
Grid to cathode and heater	2.2	2.6	$\mu\mu\text{f}$
Plate to cathode and heater	0.4	1.0	$\mu\mu\text{f}$

Characteristics, Class A₁ Amplifier (Each Unit):

Plate Voltage.	100	volts
Cathode-Bias Resistor [■]	50 \diamond	ohms
Amplification Factor	38	
Plate Resistance	7100	ohms
Transconductance	5300	μmhos
Plate Current.	8.5	ma

Mechanical:

Mounting Position. Any

Maximum Overall Length 2-1/8"

Maximum Seated Length. 1-7/8"

Length, Base Seat to Bulb Top (Excluding tip). 1-1-2" \pm 3/32"

Maximum Diameter 3/4"

Bulb T-5-1/2

Base Small-Button Miniature 7-Pin (JETEC No. E7-1)

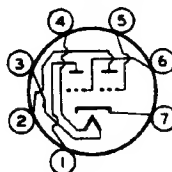
Basing Designation for BOTTOM VIEW 7BF

Pin 1 - Plate of
Unit No. 2

Pin 2 - Plate of
Unit No. 1

Pin 3 - Heater

Pin 4 - Heater



Pin 5 - Grid of
Unit No. 1

Pin 6 - Grid of
Unit No. 2

Pin 7 - Cathode

^o With external shield JETEC No. 316 connected to cathode.

[■] Fixed-bias operation is not recommended.

\diamond Value is for both units operating at the specified conditions.

← indicates a change.

MAR. 1, 1955

TUBE DIVISION

DATA

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MEDIUM-MU TWIN TRIODE

AMPLIFIER - Class A₁

Values are for Each Unit

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE 300 max. volts

GRID VOLTAGE:

Positive bias value. 0 max. volts

PLATE DISSIPATION. 1.5 max. watts

→ PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode. . 100 max. volts

Heater positive with respect to cathode. . 100 max. volts

Maximum Circuit Values (For maximum rated conditions):

Grid-Circuit Resistance:

For cathode-bias operation 0.5 max. megohm

RF POWER AMPLIFIER & OSCILLATOR - Class C Telegraphy

Key-down conditions per tube without modulation

Values are for Each Unit

Maximum Ratings, Design-Center Values:

DC PLATE VOLTAGE 300 max. volts

DC GRID VOLTAGE:

Negative bias value. -40 max. volts

→ Positive bias value. 0 max. volts

DC PLATE CURRENT 15 max. ma

DC GRID CURRENT. 8 max. ma

DC PLATE INPUT 4.5 max. watts

PLATE DISSIPATION. 1.5 max. watts

→ PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode. . 100 max. volts

Heater positive with respect to cathode. . 100 max. volts

Typical Push-Pull Operation at Frequencies up to 50 Mc:*

Values are for Both Units

DC Plate Voltage 150 volts

DC Grid Voltage:

From a fixed supply of -10 volts

From a grid resistor of 625 ohms

From a cathode resistor of 220 ohms

DC Plate Current 30 ma

DC Grid Current (Approx.)* 16 ma

Driving Power (Approx.)* 0.35 watt

Useful Power Output (Approx.). 3.5 watts

* Approximately 1.0 watt can be obtained when the 6J6 is used at 250 Mc as a push-pull oscillator with a plate voltage of 150 volts, with maximum rated plate dissipation, and with a grid resistor of 2000 ohms common to both units.

* For effect of load resistance on grid current and driving power, refer to *TUBE RATINGS-Grid Current and Driving Power* in the General Section.

→ Indicates a change.

MAR. 1, 1955

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DATA

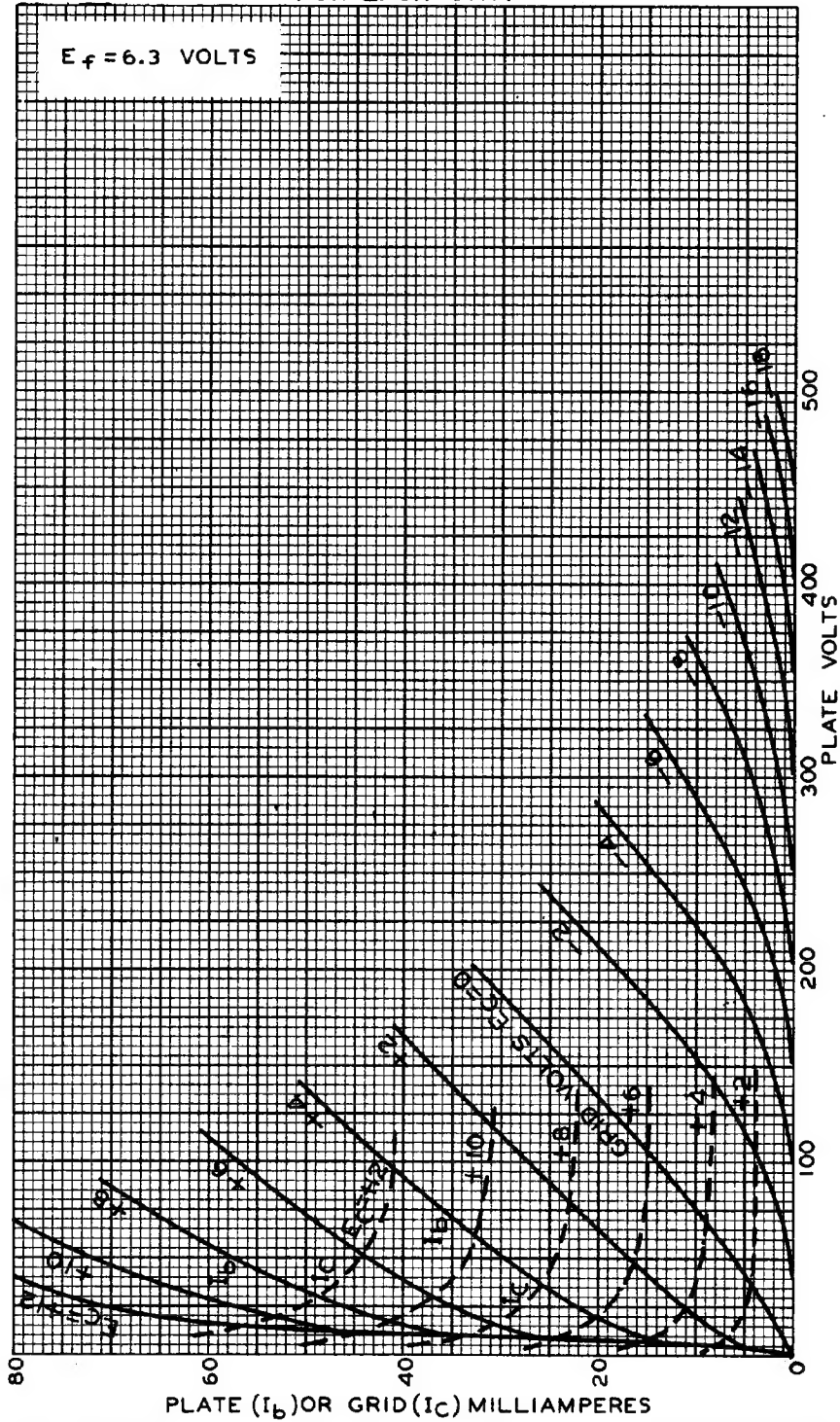
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AVERAGE PLATE CHARACTERISTICS FOR EACH UNIT

$E_f = 6.3$ VOLTS



OCT. 21, 1944

RCA VICTOR DIVISION
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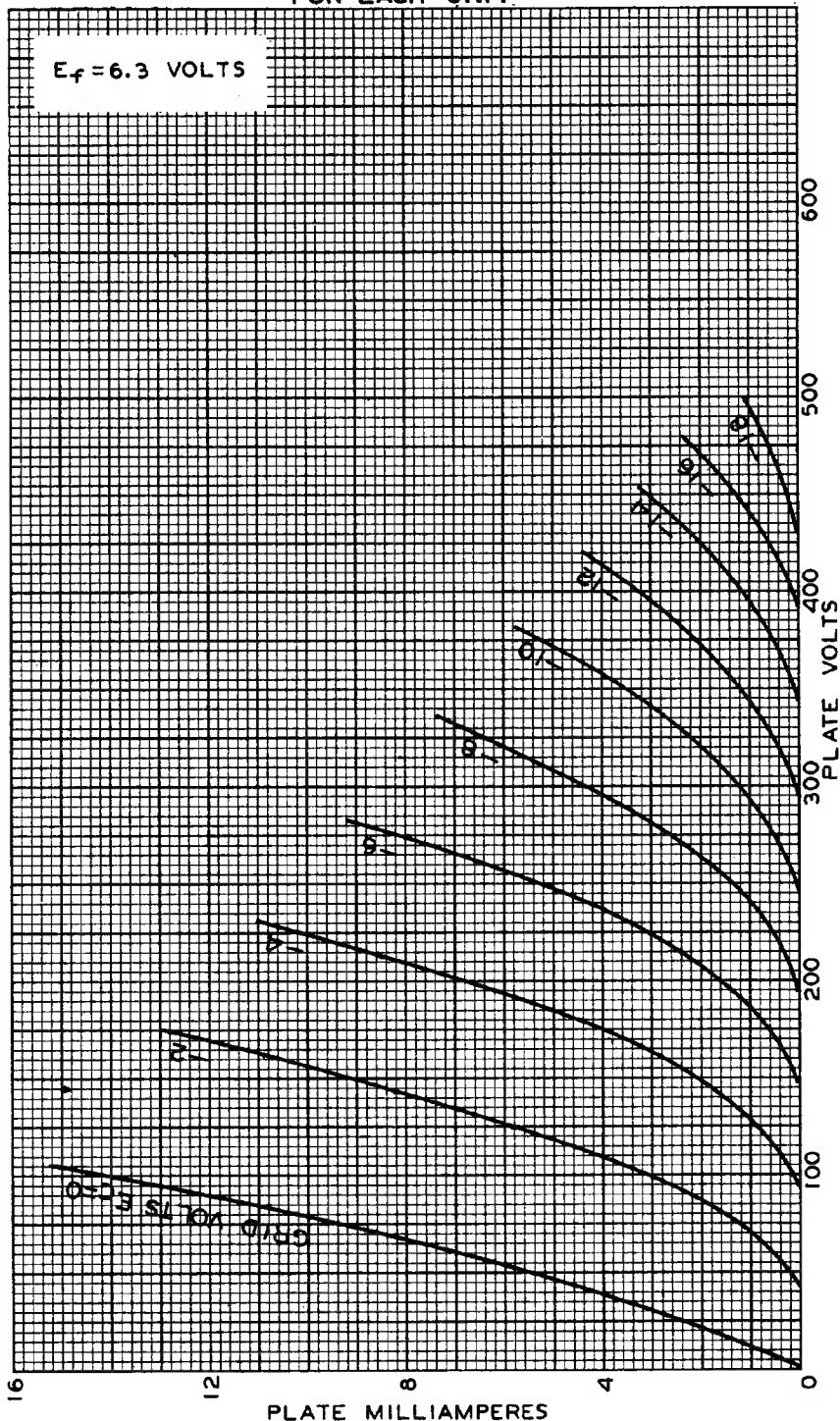
92CM-6403R1

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AVERAGE PLATE CHARACTERISTICS FOR EACH UNIT



SEPT. 20, 1944

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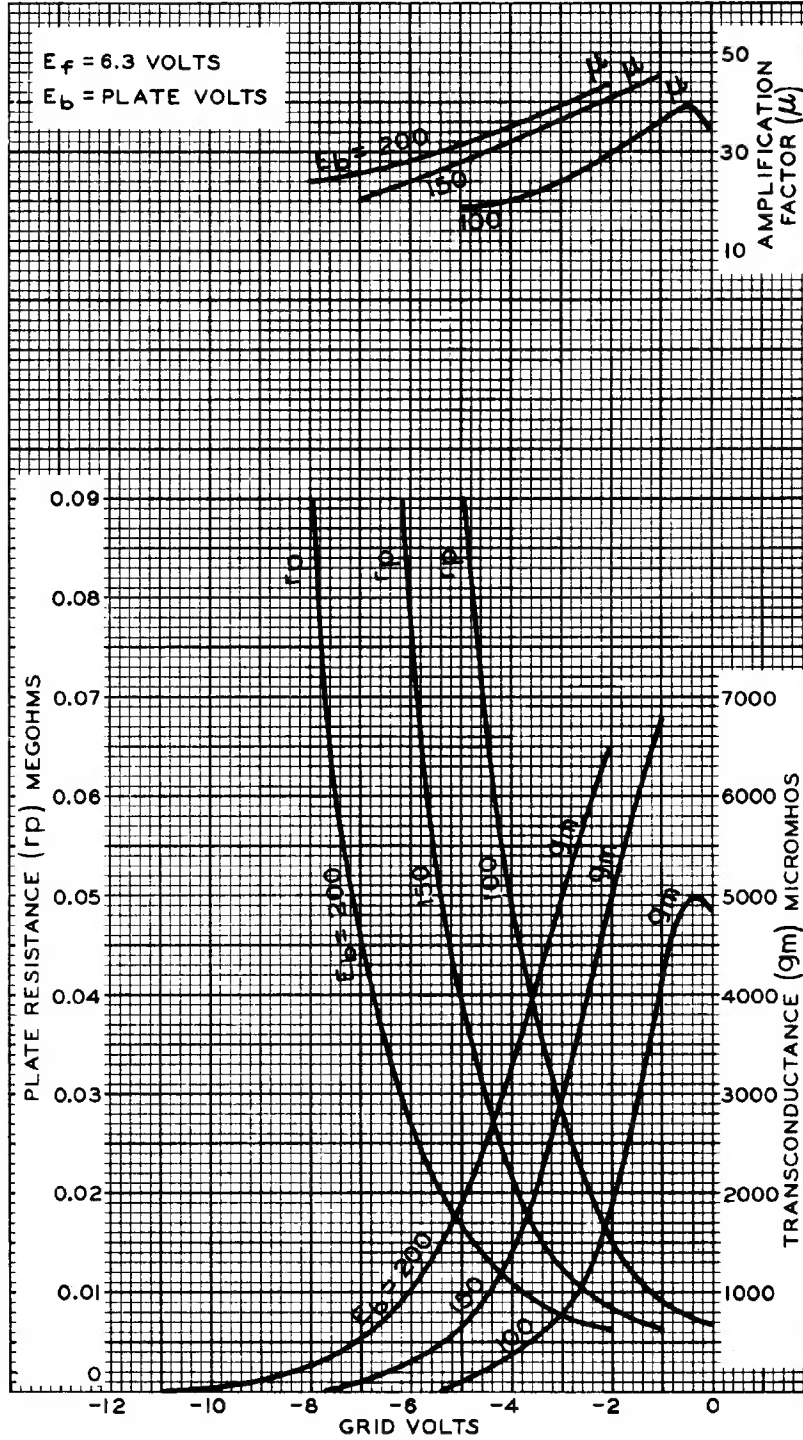
92CM-6402R1



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AVERAGE CHARACTERISTICS FOR EACH UNIT

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JUNE 28, 1951

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-7672